IN THE CLAIMS

Please amend the claims as follows:

1. (original) A system for communicating with an RFID tag, the system comprising:

a multi-layer surface, comprising:

a layer of substrate;

a printed conductive antenna on the layer of substrate; and

at least one additional layer substrate overlying the antenna;

a transceiver configured to communicate with an RFID tag via the antenna; and

one or more computerized databases configured to provide data to or to retrieve data from the RFID tag via the transceiver.

2. (original) The system of claim 1, wherein the antenna is disposed on the layer of substrate by stenciling or screen printing.

3. (original) The system of claim 1, wherein the antenna is a single loop antenna including a single trace of conductive material disposed on the layer of substrate.

4. (original) The system of claim 1, wherein the antenna is a multiple-loop antenna including at least two parallel traces of conductive material disposed on the layer of substrate.

5. (original) The system of claim 1, wherein the layer of substrate and the at least one additional layer of substrate form a high pressure decorative laminate.

6. (original) The system of claim 5, wherein the decorative laminate is formed of at least one layer of phenolic impregnated cellulosic material and at least one layer of melamine impregnated cellulosic material.

7. (original) The system of claim 1, wherein the layer of substrate is a vinyl sheet.

8. (original) The system of claim 1, wherein the antenna is configured for transmitting and receiving signals at a frequency of approximately 13.5 MHz.

9. (original) The system of claim 1, wherein the antenna is configured for transmitting and receiving signals at a frequency of approximately 915 MHz.

10. (original) The system of claim 1, further comprising a shield operative with the multi-layer surface to shield interference from or to the antenna.

11. (original) A multi-layer surface, the surface comprising:
a first substrate layer;
a printed conductive antenna on the first substrate layer; and
at least one additional layer overlying the antenna to form a laminate structure.

12. (original) The structure of claim 11, wherein the antenna is disposed on the layer of substrate by stenciling or screen printing.

13. (original) The structure of claim 11, wherein the antenna is a single loop antenna including a single trace of conductive material disposed on the layer of substrate.

14. (original) The structure of claim 11, wherein the antenna is a multiple-loop antenna including at least two parallel traces of conductive material disposed on the layer of substrate.

15. (original) The structure of claim 11, wherein the layer of substrate and the at least one additional layer of substrate form a high pressure decorative laminate.

16. (original) The structure of claim 15, wherein the decorative laminate is formed of at least one layer of phenolic impregnated cellulosic material and at least one layer of melamine impregnated cellulosic material.

17. (original) The structure of claim 11, wherein the layer of substrate is a vinyl sheet.

18. (original) The structure of claim 11, wherein the antenna is configured for transmitting and receiving signals at a frequency of approximately 13.5 MHz.

19. (original) The structure of claim 11, wherein the antenna is configured for transmitting and receiving signals at a frequency of approximately 915 MHz.

20. (original) The structure of claim 11, further comprising a shield operative with the multi-layer surface to shield interference from or to the antenna.

21. (original) A multi-layer laminate structure comprising:

at least one phenolic impregnated layer of cellulosic material;

a decorative, melamine impregnated layer of cellulosic material disposed on the phenolic impregnated layer;

a protective, melamine impregnated layer of cellulosic material disposed on the decorative layer; and

a printed RF antenna formed at an interface between phenolic impregnated layers of the structure or between a phenolic impregnated layer and the decorative layer.

22. (original) The structure of claim 21, wherein the layers are laminated by applying a pressure to the layers under elevated temperatures to form a laminate.

23. (original) The structure of claim 22, wherein the laminate is a high pressure decorative laminate.

24. (original) The structure of claim 22, wherein the laminate is a low pressure decorative laminate.

25. (original) The structure of claim 21, wherein the antenna is configured for transmitting and receiving signals at a frequency of approximately 13.5 MHz.

26. (original) A multi-layer shelf, comprising:

a shelf substrate;

a first laminate structure attached to a first surface of the shelf substrate, wherein the first laminate structure comprises a first layer, a conductive antenna printed on the first layer, and at least one additional layer bonded to the first layer such that the antenna is covered.

27. (original) The shelf of claim 26, further comprising a second laminate structure attached to an opposing surface of the shelf substrate, wherein the second laminate structure comprises a third layer, a conductive mesh, and a fourth layer bonded to the third layer such that the conductive mesh is between the third and fourth layer.

28. (original) The shelf of claim 27, wherein the conductive mesh forms a shield interference to or from the antenna.

29. (original) The shelf of claim 26, wherein the first laminate structure comprises at least one phenolic impregnated cellulosic layer and at least one melamine impregnated layer.

30. (original) The shelf of claim 26, wherein the antenna is configured to receive signals at a radio frequency.

31. (original) The shelf of claim 26, wherein the antenna is configured to receive signals at a frequency of approximately 13.5 MHz.

32. (original) The shelf of claim 26, wherein the antenna is configured to receive signals at a frequency of approximately 915 MHz.

33. (original) A method for making a multi-layer structure, comprising:

disposing a fluid on a first layer to form a conductive antenna;

placing one or more additional layers on the first layer such that the antenna is covered to form a stack; and

applying one or more of heat and pressure to the stack to bond the first layer and the one or more additional layers.

34. (original) The method of claim 33, wherein the fluid is an ink and is disposed on the first layer via a printing process.

35. (original) The method of claim 33, comprising curing the conductive antenna prior to placing the one or more additional layers on the first layer.

36. (original) The method of claim 33, wherein the first and second layers are phenolic impregnated cellulosic layers.

37. (original) The method of claim 33, wherein the first layer is a phenolic impregnated layer and the second layer is a melamine impregnated layer.

~~36~~38. (currently amended) The method of claim 33, wherein the antenna is printed by stenciling or screen printing.

~~37~~39. (currently amended) The method of claim 33, wherein the antenna is printed with a silver-containing ink.

~~38~~40. (currently amended) A method for making a laminate structure comprising:

printing a conductive antenna on a phenolic impregnated layer;

disposing at least a melamine impregnated layer on the phenolic impregnated layer; and

applying one or more of heat and pressure to the layers to bond the layer to one another with the conductive antenna therebetween.

~~39~~41. (currently amended) The method of claim ~~38~~40, comprising disposing a second phenolic impregnated layer between the phenolic impregnated layer and the melamine impregnated layer such that the conductive antenna is disposed between the two phenolic impregnated layers.

[40]42. (currently amended) The method of claim ~~38~~40, wherein the conductive antenna is cured prior to disposing the melamine impregnated layer thereon.

[41]43. (currently amended) The method of claim ~~38~~40, wherein the layers form a high pressure decorative laminate following the application of elevated pressure and elevated temperature to the layers.

[42]44. (currently amended) The method of claim ~~38~~40, wherein the layers form a low pressure decorative laminate following the application of elevated pressure and elevated temperature to the layers.